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C/ (cont)
21. (Newly Added) A network connection as claimed in claim 15, wherein the at least two twisted wires each have a double form.

22. (Newly Added) Use of a cable having at least two twisted wires in a network, comprising:

a plurality of network users each having a network coupler, wherein the network couplers are adapted to provide a symmetrical, differential data transmission between the network users; and

at least two twisted wires which electrically connect the network users in a network, wherein the at least two twisted wires have the same electrical resistance and the at least two twisted wires are coupled to a single terminal of a voltage source, and wherein energy is transferred from the single terminal equally through the at least two twisted wires and differentially through each of the two twisted wires.

Remarks

Status of the Claims

Claims 15-22 have are currently pending in the captioned application. Claims 1-14 have been cancelled and claims 15-22 have been added by way of the present amendment. Claims 15 and 22 are the independent claims.

Rejections Under 35 USC § 103(a)

Claims 1 and 9 were rejected under 35 USC § 103(a) as being unpatentable over *Pincadet* (US 4,621,170) in view of *Watanabe, et al.* (US 5,500,774) further in view of tertiary

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references as set forth in the Office Action. While these claims have been cancelled rendering this rejection moot, it is respectfully submitted that the newly added claims are believed to be patentable over the applied references for at least the reasons set forth herein.

Newly added independent claim 15 is drawn to a network connection and newly added independent claim 22 is drawn to a use of a cable in a network. Each of these claims include the limitations of "...at least two twisted wires which electrically connect the network users in a network, wherein the at least two twisted wires have the **same electrical resistance** and the at least two twisted wires are **coupled to a single terminal of a voltage source**, and wherein energy is transferred from the single terminal equally through the at least two twisted wires..."

It is respectfully submitted that the applied art lacks at least the teaching of the captioned limitations of claims 15 and 22.

Unlike the captioned portion of claim 1, the reference to Pincadet teaches the use of twisted pair telephone cable in which a **positive pole** of a voltage source is connected to one of the wires and a **negative pole** is connected to the other. As such, the energy from each terminal of the voltage source is transferred to one of the wires.

Furthermore, the reference to Pincadet specifically lacks at least the teaching that the at least two twisted wires **are coupled to a single terminal of a voltage source**; that the two twisted wires have the **same electrical resistance**; and that energy is transferred from the single terminal equally through

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the at least two wires as is specifically claimed. As to the former, the resistors R_{24} and R_{30} of *Pincadet* are of the same resistance, but there is no teaching that the wires 30 and 31 are of the same resistance.

Finally, it is noted that the reference to *Pincadet* includes the teaching of a unit for transmission of messages from a central station 10 to a local station 12. Impulses are transmitted, and these impulses are composed of two simultaneous current peaks having the same amplitudes but opposite polarities, along wires 31 and 33. The significance of this teaching will be apparent as the present discussion continues.

(Please refer to column 4, lines 36-46; and column 5, lines 27-51 of *Pincadet* for support for the above assertions.)

From the above discussion, it is clear that the reference to *Pincadet* is void of the teaching of at least the referenced portions of claims 15 and 22.

The Office Action relied on the reference to *Watanabe, et al.* for the teaching of a single terminal of a voltage source. It is respectfully asserted that the motivation for combining these references is wholly lacking. To this end, it is well established that the desirability of the modification must be suggested by the prior art.

The references to *Pincadet* and *Watanabe, et al.* fail to suggest any motivation for, or desirability of, the changes espoused by the Office Action. The Office Action suggests that because the both references teach the transmission of signals the motivation to combine the references is present. It is certainly not reasonable to combine these references based

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solely on the fact that both references are drawn to signal transmission.

Furthermore, it is well known that for a reference to be properly applied in a rejection, it must be in the inventors' field of endeavor or reasonably pertinent to the specific problem with which the inventor was involved.

Clearly, circuits for setting the write current of a magnetic disc apparatus, which is the field of the invention to *Watanabe, et al.*, is not within the field of endeavor of the inventors of the present application, which is network interfaces. Moreover, the reference to *Watanabe, et al.* is drawn to an integrated circuit (IC) for writing data to a magnetic disc. There is not teaching or suggest of use in a network device, no discussion of signal transmission along twisted pairs, or, particularly, any relevant disclosure drawn to solving the problem of having both terminals of an energy power supply for network users realized via separate electrical connections. As such, the reference to *Watanabe, et al.* is not reasonably pertinent to the specific problem with which the inventor was involved.

For at least the reasons set forth above, it is respectfully asserted that the reference to *Watanabe* is not properly applicable to the claims of the present invention. As such, any rejection based on *Watanabe* is improper.

Finally, assuming *arguendo* that the reference to *Watanabe, et al.* were relevant and applicable to the present invention, if one were to connect the wires 30 and 31 of *Pincadet* to a single terminal in (e.g., terminal 22), the intended function of the circuit would be lost.

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Accordingly, for at least the reasons set for the above, claim 1 and the claims that depend therefrom are believed to be allowable over the applied art. Allowance is earnestly solicited.

Conclusion

In view of the foregoing, withdrawal of all objections and rejections is respectfully requested. Allowance of all pending claims is earnestly solicited.

Except as otherwise stated in the previous Remarks, applicants note that each of the amendments have been made to place the claims in better form for U.S. practice or to clarify the meaning of the claims; not to distinguish the claims from prior art references, otherwise narrow the scope or comply with other statutory requirements. Moreover, Applicants reserve all rights they may have under the Doctrine of Equivalents.

In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact William S. Francos, Esq. (Reg. No. 38,456) at (610) 375-3513 to discuss these matters.


If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number 50-0238 for any additional fees under 37 C.F.R. \$1.16 or under 37 C.F.R. \$1.17.

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Respectfully submitted on behalf of:

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